

## **REMARKS**

This is a full and timely response to the Office Action of June 18, 2003.

Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this First Response, claims 1, 2, 4-8, 10, 11, and 13-19 are pending in this application. Claims 1, 7, 11, and 15 are directly amended herein, and claims 3, 9, and 12 are canceled without prejudice or disclaimer. It is believed that the foregoing amendments add no new matter to the present application.

### **Response to §103 Rejections**

In order for a claim to be properly rejected under 35 U.S.C. §103, the combined teachings of the prior art references must suggest all features of the claimed invention to one of ordinary skill in the art. See, *e.g.*, *In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In Re Keller*, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). In addition, "(t)he PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1592, 1598 (Fed. Cir. 1988) (Citations omitted).

### Claim 1

Claim 1 presently stands rejected under 35 CFR §103 as allegedly being unpatentable over *Rasmus et al.* in view of *Armistead et al.* Amended claim 1 reads as follows:

1. (Currently Amended) A communication apparatus for communicating with telephony networks, comprising:
  - memory for storing sets of impedance control values used for simulating a plurality of circuit impedances;
  - a processor configured to:
    - select one of said sets of impedance control values based on characteristics of a telephony network to which the communication apparatus is or will be connected; and
    - combine data to be transmitted over said telephony network with said selected set of impedance control values;***
    - a digital-to-analog converter that converts the combined data and said selected set of impedance control values into analog signals;*** and
    - an interface port connected to said telephony network that transmits the output of the digital-to-analog converter over the telephony network, wherein the impedance required by the telephony network is simulated based on the selected set of impedance control values. (Emphasis added).

Applicant respectfully asserts that *Rasmus et al.* and *Armistead et al.* fail to teach or suggest at least the features of claim 1 highlighted hereinabove.

In this regard, Applicant asserts that *Rasmus et al.* nor *Armistead et al.* teach or suggest a processor configured to “combine data to be transmitted over said telephony network with said selected set of impedance control values,” and “a digital-to-analog converter that converts the combined data and said selected set of impedance control values into analog signals.” Support for such limitations is found at page 9. Line 22 through page 10, line 6 in the specification, which reads as follows:

“The system manager 62 is configured to combine (*e.g.*, add) the digital data defining the foregoing information with the digital data from the aforementioned set of impedance control values 99 being continuously transmitted through D/A converter 54 to interface port 52. Therefore, the analog signal produced by the D/A converter 54 represents superimposition of the digital data defining the foregoing information to be transmitted to communication device 38 with the digital data defining the aforementioned set of analog signals derived from impedance control values 99. Even when superimposed with another analog signal, the

analog signals derived from the set of impedance control values 99 should cause the interface port 52 to exhibit the same simulated impedance.”

Notably, the combining of the data occurs prior to or concurrent with submitting the data to the digital-to-analog converter for transmission to the interface port. In other words, the digital-to-analog conversion is on the combined data.

On the other hand, *Rasmus et al.* appears to teach a digital communication systems that employs a digital-to-analog converter to control the “y-intercept” and the “slope” information provided by the processor. See *Rasmus et al.*, column 10, lines 16-23. The cited art fails to suggest combining these values prior to converting such values to analog signals.

Wherefore, Applicant respectfully asserts that the combination of *Rasmus et al.* and *Armistead et al.* does not teach or suggest the features of amended claim 1. Thus, Applicant respectfully asserts that the 35 U.S.C. §103 rejection of claim 1 be withdrawn.

#### **No Motivation to Combine Found in the Prior Art**

Additionally, the U.S. Patent and Trademark Office provides the following:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).” (MPEP 706.2(j) *Contents of a 35 U.S.C. 130 Rejection*, in pertinent part. Emphasis added).

Applicant respectfully asserts that the Office Action rejection of claim 1 under 35 U.S.C. 103(a) is improper because neither *Rasmus et al.* nor *Armistead et al.* expressly or implicitly provide some suggestion or motivation to one of ordinary skill in the art, to modify either reference or to combine the two references. In particular, the Office Action indicates

that “it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of *Armistead et al.* into that of *Rasmus et al.* making it possible to control modem devices based on areas in which it would be used without having to buy adapters and so forth.”

Applicant respectfully asserts that such a conclusive statement finds no support in either *Rasmus et al.* or *Armistead et al.* Specifically, Applicant notes, with regret, that the Office Action does not indicate where a teaching or suggestion of the above-quoted motivations may be found in the cited references. Therefore, Applicant respectfully asserts that the aforementioned conclusive statement does not support combining the teachings of either reference. “Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).”

For at least the foregoing reasons, Applicant respectfully asserts that the Office Action fails to establish a *prima facie* case of obviousness with respect to claim 1. Thus, Applicant submits that the rejection of claim 1 under 35 U.S.C. §103 is improper, thereby rendering the claims in condition for allowance.

#### **Claims 2 and 4-6**

Claims 2 and 4-6 presently stand rejected in the Office Action under 35 USC §103 as allegedly unpatentable over *Rasmus et al.* in view of *Armistead et al.* Applicant submits that pending dependent claims 2 and 4-6 contain all features of their respective independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claims 2 and 4-6 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### Claim 7

Claim 7 presently stands rejected under 35 CFR §103 as purportedly being unpatentable over *Rasmus et al.* in view of *Armistead et al.* Amended claim 7 reads as follows:

7. (Currently Amended) A communication apparatus for communicating with telephony networks, comprising:  
means for storing sets of impedance control values used for simulating a plurality of circuit impedances;  
means for selecting one of said sets of impedance control values based on characteristics of a telephony network to which the communication apparatus is or will be connected;  
***means for combining data to be transmitted over said telephony network with said selected set of impedance control values;***  
***means for converting said combined data and said selected set of impedance control values into analog signals;*** and  
means for transmitting said analog signals over said telephony network, wherein the impedance required by the telephony network are simulated based on the selected set of impedance control values. (Emphasis added).

Applicant asserts that claim 7 is patentable for at least the reasons argued hereinabove with reference to claim 1. Therefore, Applicant requests that the rejection of claim 1 be withdrawn.

### Claims 8 and 10

Claims 8 and 10 presently stand rejected in the Office Action under 35 USC §103 as allegedly unpatentable over *Rasmus et al.* in view of *Armistead et al.* Applicant submits that pending dependent claims 8 and 10 contain all features of their respective independent claim 7. Since claim 7 should be allowed, as argued hereinabove, pending dependent claim 8 and 10 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### Claim 11

Claim 11 presently stands rejected under 35 CFR §103 as unpatentable over *Rasmus et al.* in view of *Armistead et al.* Amended claim 11 reads as follows:

11. (Currently Amended) A method for communicating with telephony networks, comprising the steps of:  
providing an interface port;  
interfacing said interface port with a communication connection of a telephony network;  
storing sets of impedance control values used for simulating a plurality of circuit impedances;  
selecting one of said sets of impedance control values based on characteristics of a telephony network to which the interface port is or will be connected;  
***combining data to be transmitted over said telephony network with said selected set of impedance control values;***  
***converting said combined data and said selected set of impedance control values into analog signals;***  
transmitting said analog signals over the telephony network; and  
simulating the impedance required by the telephony network based on the selected set of impedance control values. (Emphasis added).

Applicant asserts that claim 11 is patentable for at least the reasons argued hereinabove with reference to claim 1. Therefore, Applicant requests that the rejection to claim 11 be withdrawn.

### Claims 13 and 14

Claims 13 and 14 presently stand rejected in the Office Action under 35 USC §103 as allegedly unpatentable over *Rasmus et al.* in view of *Armistead et al.* Applicant submits that pending dependent claims 13 and 14 contain all features of their respective independent claim 11. Since claim 11 should be allowed, as argued hereinabove, pending dependent claims 13 and 14 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### Claim 15

Claim 15 presently stands rejected under 35 CFR §103 as unpatentable over *Rasmus et al.* in view of *Armistead et al.* Amended claim 15 reads as follows:

15. A method for communicating with telephony networks, comprising the steps of:  
providing an interface port;  
interfacing said interface port with a communication connection of a telephony network;  
transmitting analog signals to said interface port, said analog signals having voltages; and  
***varying said voltages of said analog signals such that said interface port continuously simulates a particular impedance during a communication session in response to said analog signals.*** (Emphasis added).

Applicant traverses the Office Action assertion that claim 15 is unpatentable over *Rasmus et al.* in view of *Armistead et al.* in that neither reference teaches nor suggests at least the features of claim 15 highlighted hereinabove.

In this regard, claim 15 specifically claims “***varying*** said voltages of said analog signals such that said interface port ***continuously*** simulates a particular impedance during a communication session in response to said analog signals.” (Emphasis added). However, *Rasmus et al.* nor *Armistead et al.* teaches or suggests this feature.

Further it appears that, the Office Action fails to allege that the cited art suggests or teaches the aforementioned limitation. Thus, the Office Action fails to establish that each feature of claim 1 is suggested by the cited art, therefore, fails to establish a *prima facie* case of obviousness with respect to claim 1. Accordingly, for at least the reasons cited, Applicant respectfully requests that the rejection to claim 15 be withdrawn.

### Claims 16-19

Claims 16-19 presently stand rejected in the Office Action under 35 USC §103 as allegedly unpatentable over *Rasmus et al.* in view of *Armistead et al.* Applicant submits that pending dependent claims 16-19 contain all features of their respective independent claim 15. Since claim 15 should be allowed, as argued hereinabove, pending dependent claims 16-19 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

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